

ABSTRACT

A UV-assisted advanced-ozonation water treatment system comprises a water treating tank 1, an ozonic water tank 2, an ozonized gas generator 3, and a UV light source 4 disposed in the water treating tank 1 and having a UV-radiating surface 4a, and an ozonic water jetting device including jetting nozzles 5 for jetting the ozonic water onto the UV-radiating surface of the UV light source. An ozonized gas diffusing device 12 is placed in the ozonic water tank 2.

5 An ozonized gas generated by the ozonized gas generator 3 and compressed by a compressor 13 at a pressure in the range of about 2 to about 3 kg/cm<sup>2</sup> is diffused into the ozonic water tank 2 by the ozonized gas diffusing device 12. A high-pressure, a high-ozone-concentration ozonic water produced in the

10 ozonized water tank 2 is jetted through the jetting nozzles 5 onto the UV-radiating surface 4a.

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